



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of) Art Unit: 2815
Shunpei YAMAZAKI et al.) Examiner: B. Baumeister
Serial No. 10/084,935)
Filed: March 1, 2002)
For: INSULATING FILM AND)
METHOD OF PRODUCING)
SEMICONDUCTOR DEVICE)

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with The United States Postal Service with sufficient postage as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on January 22, 2004.

Adelle M. Stamps

RESPONSE

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

The Official Action mailed August 22, 2003, has been received and its contents carefully noted. Filed concurrently herewith is a *Request for Two Month Extension of Time*, which extends the shortened statutory period for response to January 22, 2004. Accordingly, the Applicants respectfully submit that this response is being timely filed.

The Applicants note with appreciation the consideration of the Information Disclosure Statements filed on March 1, 2002, June 4, 2002, October 3, 2002, and April 11, 2003. The Applicants await consideration of the Information Disclosure Statement filed December 16, 2003.

Claims 1-34 are pending in the present application, of which claims 1, 11, 19 and 27 are independent. For the reasons set forth in detail below, all claims are believed to be in condition for allowance.

Paragraph 2 of the Official Action rejects claims 1-34 as anticipated by U.S. Patent No. 5,313,075 to Zhang et al. The Applicants respectfully traverse the rejection because the Official Action has not established an anticipation rejection.

As stated in MPEP § 2131, to establish an anticipation rejection, each and every element as set forth in the claim must be described either expressly or inherently in a single prior art reference. Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987).

The Applicants respectfully submit that an anticipation rejection cannot be maintained against the independent claims of the present invention. Zhang does not teach all the elements of the independent claims, either explicitly or inherently. Independent claims 1, 11, 19 and 27 recite, among other features, a specific carbon concentration range ($5 \times 10^{19} \text{ cm}^{-3}$ or less) of an insulating film comprising silicon oxide. The Official Action asserts that the oxide in Zhang "includes C at a concentration of $5 \times 10^{18} \text{ cm}^{-3}$ (col. 10, lines 60-64)" (page 3, Paper No. 11). However, this portion of Zhang describes the carbon concentration in "the semiconductor film." Zhang does not teach a specific carbon concentration range ($5 \times 10^{19} \text{ cm}^{-3}$ or less) of an insulating film comprising silicon oxide, either explicitly or inherently.

Since Zhang does not teach all the elements of the independent claims, either explicitly or inherently, an anticipation rejection cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. § 102(e) are in order and respectfully requested.

Paragraph 3 of the Official Action rejects claims 1-34 as anticipated by JP 04-165679 to Yamazaki, or in the alternative, as obvious based on the combination of Yamazaki '679 and JP 04-032267 to Chiyou. The Applicants respectfully traverse the rejection because the Official Action has not established an anticipation rejection and has not made a *prima facie* case of obviousness.

As stated in MPEP §§ 2142-2143.01, to establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365,

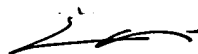
1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988); In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

The prior art, either alone or in combination, does not teach or suggest all the features of the independent claims. As noted in the Official Action, Yamazaki '679 and Chiyou appear to correspond to the Japanese patent applications to which Zhang claims foreign priority. The Applicants respectfully submit that Yamazaki '679 and/or Chiyou do not teach or suggest a specific carbon concentration range ($5 \times 10^{19} \text{ cm}^{-3}$ or less) of an insulating film comprising silicon oxide.

Since Yamazaki '679 and/or Chiyou do not teach or suggest all the claim limitations, an anticipation rejection and a *prima facie* case of obviousness cannot be maintained. Accordingly, reconsideration and withdrawal of the rejections under 35 U.S.C. §§ 102(b) and 103(a) are in order and respectfully requested.

Should the Examiner believe that anything further would be desirable to place this application in better condition for allowance, the Examiner is invited to contact the Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,



Eric J. Robinson
Reg. No. 38,285

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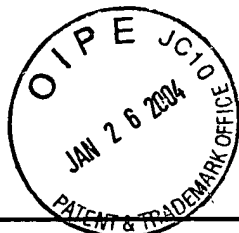


Image AF/2815 B

PTO/SB/21 (08-00)

TRANSMITTAL FORM

(to be used for all correspondence after initial filing)

TRANSMITTAL FORM (to be used for all correspondence after initial filing)	Application Number	10/084,935
	Filing Date	March 1, 2002
	First Named Inventor	Shunpei YAMAZAKI et al.
	Group Art Unit	2815
	Examiner Name	B. Baumeister
Total Number of Pages in This Submission	Attorney Docket Number	0756-2447

ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input checked="" type="checkbox"/> Fee Attached <input checked="" type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input checked="" type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Response to Missing Parts/Incomplete Application <input type="checkbox"/> Response to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Assignment Papers (for an Application) <input type="checkbox"/> Drawing(s) <input type="checkbox"/> Declaration and Power of Attorney <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____	<input type="checkbox"/> After Allowance Communication to Group <input type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input checked="" type="checkbox"/> Appeal Communication to Group (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input type="checkbox"/> Other Enclosures 1. 2. 3. 4. 5. 6.
Remarks		<input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees required or credit any overpayments to Deposit Account No. 50-2280 for the above identified docket number.

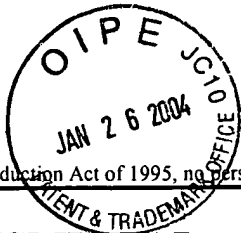
SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm or Individual name	Eric J. Robinson, Reg. No. 38,285 Robinson Intellectual Property Law Office, P.C. PMB 955 21010 Southbank Street Potomac Falls, VA 20165
Signature	
Date	January 22, 2004

CERTIFICATE OF MAILING

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PTO/SB/17 (10-03)

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**FEE TRANSMITTAL
FOR FY 2004**

Effective 10/01/2003. Patent fees are subject to annual revision.

☐ Applicant Claims small entity status. See 37 CFR 1.27.

TOTAL AMOUNT OF PAYMENT (\$ 750.00)

Complete if Known

Application Number	10/084,935
Filing Date	March 1, 2002
First Named Inventor	Shunpei YAMAZAKI et al.
Examiner Name	B. Baumeister
Group Art Unit	2815
Attorney Docket No.	0756-2447

METHOD OF PAYMENT

- 1.
- ☐
- The Commissioner is hereby authorized to charge indicated fees and credit any overpayments to:

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Law Office

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- Under 37 CFR 1.16 and 1.17 and
-
- credit overpayments

- ☐
- Applicant claims small entity status.
-
- See 37 CFR 1.27

- 2.
- ☒
- Payment Enclosed:

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- Other

FEE CALCULATION**1. BASIC FILING FEE**

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1001	770	2001	385	Utility filing fee	
1002	340	2002	170	Design filing fee	
1003	530	2003	265	Plant filing fee	
1004	770	2004	385	Reissue filing fee	
1005	160	2005	80	Provisional filing fee	

SUBTOTAL (1) (\$)

2. EXTRA CLAIM FEES

Total Claims	Extra Claims	Fee from below	Fee Paid
	-20** =	\$18	
Independent Claims	-3** =	\$86	
Multiple Dependent			

Large Entity Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description
1202	18	2202	9	Claims in excess of 20
1201	86	2201	43	Independent claims in excess of 3
1203	290	2203	145	Multiple dependent claim, if not paid
1204	86	2204	43	** Reissue independent claims over original patent
1205	18	2205	9	** Reissue claims in excess of 20 and over original patent

SUBTOTAL (2) (\$)

**or number previously paid, if greater; For Reissues, see above

FEE CALCULATION (continued)**3. ADDITIONAL FEES**

Fee Code	Large Entity Fee (\$)	Small Entity Fee Code	Small Entity Fee (\$)	Fee Description	Fee Paid
1051	130	2051	65	Surcharge - late filing fee or oath	
1052	50	2052	25	Surcharge - late provisional filing fee or cover sheet	
1053	130	1053	130	Non-English specification	
1812	2,520	1812	2,520	For filing a request for <i>ex parte</i> reexamination	
1804	920*	1804	920*	Requesting publication of SIR prior to Examiner action	
1805	1,840*	1805	1,840*	Requesting publication of SIR after Examiner action	
1251	110	2251	55	Extension for reply within first month	
1252	420	2252	210	Extension for reply within second month	\$420.00
1253	950	2253	465	Extension for reply within third month	
1254	1,480	2254	740	Extension for reply within fourth month	
1255	2,010	2255	1005	Extension for reply within fifth month	\$330.00
1401	330	2401	165	Notice of Appeal	
1402	330	2402	165	Filing a brief in support of an appeal	
1403	290	2403	145	Request for oral hearing	
1451	1,510	1451	1,510	Petition to institute a public use proceeding	
1452	110	2452	55	Petition to revive - unavoidable	
1453	1,330	2453	665	Petition to revive - unintentional	
1501	1,330	2501	665	Utility issue fee (or reissue)	
1502	480	2502	240	Design issue fee	
1503	640	2503	320	Plant issue fee	
1460	130	1460	130	Petitions to the Commissioner	
1807	50	1807	50	Processing fee under 37 CR 1.17(q)	
1806	180	1806	180	Submission of Information Disclosure Stmt	
8021	40	8021	40	Recording each patent assignment per property (times number of properties)	
1809	770	2809	385	Filing a submission after final rejection (37 CFR § 1.129(a))	
1810	770	2810	385	For each additional invention to be examined (37 CFR § 1.29(b))	
1801	770	2801	385	Request for Continued Examination (RCE)	
1802	900	1802	900	Request for expedited examination of a design application	

Other fee (specify) Terminal Disclaimer

* Reduced by Basic Filing Fee Paid

SUBTOTAL (3) (\$ 750.00)

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SUBMITTED BY

Name (Print/Type) Eric J. Robinson

Signature

Registration No.
(Attorney/Agent)

38,285

Complete (if applicable)

Telephone (571) 434-6789

Date

January 22, 2004